



Clinical Congress News

The American College of Surgeons • 85th Clinical Congress • October 10-15, 1999 • San Francisco

Web-based education spins surgeons to 2000.com

The ACS Regental Committee on Informatics sponsored a panel discussion yesterday morning to consider the ramifications for surgeons of continuing medical education (CME) on the Internet. Robert L. Parry, MD, a member of the committee, served as moderator for the session.

The first speaker was Dixie L. Fisher, PhD, division of medical education, University of Southern California (USC) School of Medicine, Los Angeles, CA, who spoke on "Developing and Implementing a Multimedia/Internet-Based Medical School Curriculum."

Dr. Fisher stated that "students don't learn from technology—they learn from teachers who use technology well." She summarized the genesis and development of computer-based medical education at USC since 1989. Last year, Dr.

Fisher said, medical students using laptop computers were able to utilize the USC MedWeb site, which contains over 21,000 files/folders and over 15,000 images covering all basic sciences.

Dr. Fisher said that USC is now in the process of making the Web site more interactive, which will enable the students to view surgical procedures and treatment options with the use of streaming videos. She demonstrated several examples of "Can you solve this case?" whereby medical students are given a set of patient problems/symptoms and asked to work their way online through to diagnosis and treatment, all the while comparing their decisions with those actually made by attending residents and surgeons.

Dr. Fisher said that she believes there are certain assumptions attendant to Web-based medical education: (1) learn-

ing "in context" improves retention, (2) comparison of decisions with medical experts improves decision making, (3) writing thought processes promotes deeper learning, and (4) exposure to a variety of cases builds expertise.

"The keys to a successful multimedia presentation," Dr. Fisher said, "are to ensure that it is better than a paper handout, that it is relevant and connects to curricula, and that it undergoes continuous evaluation and updating to ensure relevancy."

The second speaker was William D. Hardin, Jr., MD, FACS, associate professor of surgery and pediatrics, and medical director of information services, University of Alabama-Birmingham. Dr. Hardin addressed "Issues Surrounding the Development of an Office/Practice-Based Web Site."

Dr. Hardin noted that today 34 per-

cent of households in the U.S. and over 98 million individuals have Internet access. "For the first time, medicine and medical information has exceeded pornography in terms of content on the Internet," he said.

Dr. Hardin described the process of preparing office-based Web sites, which includes a team approach to content and many brainstorming sessions, identification of site customers, ascertaining site architecture/hardware constraints, security concerns, procedural issues, and personnel.

Dr. Hardin told the audience that content, not technology, should be focus of constructing a Web presence. He described the phenomena of "webmaster bottleneck"—whereby vast amounts of information are funneled through an

(continued on page 2)

Historians and experts meet

Battling presidential bullets

"Assassins and the reaction of their victims provide a fascinating arena for the study of human character," according to C. Rollins Hanlon, MD, FACS, moderator of yesterday's Science and Humanism Seminar, Presidential Gunshots. For over a decade, this seminar has "played" to a capacity crowd, and this year proved no exception, with surgeons literally sitting in the aisles and lining the walls. They came to hear three speakers discuss attempts on the lives of past U.S. presidents and how the medical personnel surrounding the presidents handled the emergent situation.

Prof. Robert V. Remini, professor emeritus of history at the University of Illinois at Chicago, discussed the "duelist" Andrew Jackson. President Jackson, he said, not only was the first and only president who ever paid off our national debt (\$60 million in 1828), but was the first president to be assaulted by another human with intent to kill.

By the time Jackson became president, Prof. Remini said, he had two bullets lodged in his body. The first bullet, which settled near the heart, came from an 1803 quarrel Jackson had with "the best shot in Tennessee" over a horse bet. Jackson suffered the effects of this bullet his entire life, as the wound peri-

odically became infected and bled. Jackson's second bullet also came from a gunfight in a barroom, Prof. Remini said. This bullet remained in his arm for 18 years until physician's finally removed it.

Prof. Remini said that Jackson suffered chronic pain from these wounds throughout his presidency, yet his indomitable spirit kept him going, "It's incredible what this man was able to do considering the physical pain he endured," he concluded.

Donald D. Trunkey, MD, FACS, professor and chairman, surgery department, Oregon Health Science University School of Medicine, Portland, then discussed the medical care received by Presidents Lincoln, Garfield, McKinley, and Kennedy.

Lincoln, he said, received "remarkable" care for the time (1865). After being shot by John Wilkes Booth, Lincoln had quick assessment and treatment. The primary surgeon, Dr. Charles A. Leale, removed a clot that had formed, started the "ABCs", and provided cardiac massage, Dr. Trunkey said.

President Garfield, Dr. Trunkey said, was shot by a disgruntled Charles Guiteau. The bullet pierced the president in the back, 3 1/2 inches to the

right of the spine at the level of the 11th rib.

The president was treated by several physicians. Since X rays were not available at the time, Dr. Trunkey noted that

the surgeons probed the wound site with their fingers on numerous occasions.

(continued on page 2)



Left to right: Dr. O'Leary, Dr. Trunkey, Dr. Hanlon, Dr. Remini.

WEB-BASED EDUCATION, from page 1

individual or team at a rate far greater than can be accommodated.

Finally, Dr. Hardin told attendees, "It's not about data—it's about transforming data into knowledge and getting it out to the consumer."

The third speaker was W. William Haines, senior director of product development and marketing, MDConSult, St. Louis, MO. Mr. Haines spoke on "What Online Surgical References and CME Opportunities Exist on the Net Today and What Can We Expect from the Established Publishers in the Near Future."

Mr. Haines stated that Web sites devoted to surgery are relatively few, contain limited information, are for the most part free of charge, have a wide-range of quality, and can raise some important credibility issues. He then surfed the Web and illustrated a number of prominent publisher-based online sites that address surgery and medicine.

Mr. Haines concluded by highlighting a number of trends in the Internet/publishing industry: (1) there seems to be a much higher *expressed* interest than *real* interest in online CME, (2) there is a wide variety of off-line CME opportunities currently available, (3) the development of smaller sites is decreasing, (4) paid subscription access to online journals, serials, medical literature will increase, with "free sites" slowly disappearing, and (5) specialty-specific online collections from major publishers will continue to increase, for a price.

The final speaker was James Norman,

MD, FACS, professor of surgery and internal medicine, University of South Florida, and founder of *YourDoctor.com*, who spoke on "Your Doctor.com: How Silicon Valley Is Changing the Way You Will Practice Medicine."

Dr. Norman offered some philosophical observations regarding the growth of medical Web sites and how Silicon Valley is approaching Web-based medicine. He noted that there are currently over 15,000 Web sites that are devoted to health care. "Last year, over 79 percent of venture capital funding went to Internet-related companies. Next year, it will increase to 85 percent," he said.

Dr. Norman discussed the dilemma currently facing the gurus in Silicon Valley regarding which online health care approach to choose (revenue-based, patient-based, physician-based). "Just because the technology is available does not mean that surgeons/physicians will embrace it," he said.

Among the questions Silicon Valley will address in the near future: (1) Medicine is a huge enterprise—do you cover all the topics or just selected parts? Where do you obtain information and is it credible? (2) How do you keep the information updated and fresh? (3) How can you ensure "trust" with the health care Web consumer? (4) How can you enlist the involvement of competent, expert physicians? How do you select? (5) Can online physicians be sued? Are they giving advice to or educating patients? Is there a bona fide physician/patient relationship? and (6) Can the

Web-based site make money and be trusted—given that advertising injects a certain bias into the site? Are patient privacy/trust issues violated by online access to databases?

"It is very hard to buy consumer trust.

That is why surgeons and physicians must become involved and proactive on the WWW to ensure efficacy of health care information toward the betterment of Web-based medical education," Dr. Norman concluded.

PRESIDENTIAL GUNSHOTS, from page 1

Although Garfield showed initial improvement after surgery, an infection developed and he died on Sept. 19, 1881. Dr. Trunkey told the audience that the actual cause of death was not decided, and that some of the medical press at the time exhibited outrage at the frequent probing of the wound.

McKinley was another president who received less than optimal care, Dr. Trunkey said. The president was shot on Sept. 6, 1901, while attending the Pan American Exposition.

Although he had the good fortune to be transported by motor ambulance to a hospital, the attending physicians selected Dr. Matthew Mann to be the primary physician on the case. Unfortunately, Dr. Trunkey said, Dr. Mann was an obstetrician-gynecologist who had never operated on a gunshot wound.

The president had two gunshot wounds; one lodged just above the rib, the other behind the pancreas.

Dr. Mann faced several problems during the surgery, most notably poor lighting and sub-par instruments, Dr. Trunkey said.

Although McKinley survived the operation, he ultimately succumbed to gangrene.

Finally, Dr. Trunkey touched on the assassination of John F. Kennedy on Nov. 22, 1963. He outlined the care attempted at Parkland Hospital, but reminded the audience, through autopsy photographs, of the fatal and explosive damage caused by the bullet that pierced the president's skull.

The lessons we can learn from reviewing the care received by these presidents, he said, is that a single surgeon (a "captain of the ship") is necessary to streamline and direct care in such extreme circumstances. "Consultants are necessary, but not committee medi-

cine," Dr. Trunkey said. He also discussed the value of an expert forensic pathologist and a complete autopsy.

Dennis O'Leary, president, Joint Commission on Accreditation of Healthcare Organizations, Oakbrook Terrace, IL, discussed his experiences handling the press coverage from George Washington Hospital after President Ronald Reagan was shot in 1981. Dr. O'Leary said that the students and doctors there were accessible and competent, and that "that culture had a lot to do with the saving of the president."

Dr. O'Leary said that Washington, DC, was actually the "worst" place that the president could have been shot, since all other cities had an emergency route to a hospital mapped out except Washington, because the president lives there.

The "traffic control" at the hospital was seamless, Dr. O'Leary said, and the operation to remove the bullet went well. However, he continued to say that the hospital became an "embattled fortress" due to the heavy media coverage of the event. The media's "search for drama was never-ending," Dr. O'Leary said. "I played more 'what-if' games with the media.... 'What if he received tainted blood?' 'What if he was taken to another hospital?'" Dr. O'Leary continued.

Dr. O'Leary said the simple truth is that the president received top-notch care and was "managed just like any other patient, no other operations were cancelled, and the ER was not disrupted." Dr. O'Leary said that the hospital avoided the VIP-syndrome.

Those surgeons unable to attend this seminar are encouraged to stop by the National Audio Video booth in the registration area of Moscone Center and inquire about the audiotape of session C99-GS10.

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Stephen J. Regnier

Associate Editor

Jennifer F. Herendeen

Photography Editor

Tina Woelke

Director of Communications

Linn Meyer

Photography

Chuck Giorno Photography

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Moscone Convention Center

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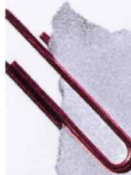
Items of interest or information must be reported to the office of the *Clinical Congress News* by 1:00 pm on the day preceding the desired day of publication.



The 1999 Surgeon's Award for Service to Safety was presented this year to F. William Blaisdell, MD, FACS (second from left), who "for almost the entire last half of this century has dedicated himself to the personal care of the injured, to the training of hundreds of surgeons in the surgery of trauma, and to research that has led to salvaging the lives of many injured people who might otherwise have perished."

Dr. Blaisdell has served on a number of ACS committees, including the Committee on Trauma and the Graduate Medical Education Committee. He is also a current member of the American Association for the Surgery of Trauma and served as its president, 1990-1991.

Presenting the award on Monday evening on behalf of the National Safety Council were Frank R. Lewis, MD, FACS, president of the American Association for the Surgery of Trauma (far left); Ann Shanklin of the National Safety Council (second from right); and David B. Hoyt, MD, FACS, Chair of the Committee on Trauma (far right).



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At the annual Fellows Leadership Society (FLS) luncheon on Monday, David G. Murray, MD, FACS, ACS Past-President and former FLS Chair (left) presented the 1999 Distinguished Philanthropist Award to Dr. and Mrs. Paul H. Jordan, Jr. Dr. and Mrs. Jordan were honored as the 11th recipients of the award for their support of the College's Development Program.



The formation of two new chapters, Switzerland and Belgium, was announced at Sunday's Board of Governors' meeting. Amilu Rothhammer, Chair, Board of Governors (right) congratulated Jean-Claude R. Givel of the new Switzerland Chapter.

Allied Meetings

Wednesday

Morning

Association of Women Surgeons

6:30 am - 10:00 am. Breakfast
San Francisco Marriott, Nob Hill, Floor Lower B-2

International Society of Surgery

6:45 am - 8:00 am. Breakfast
Hilton San Francisco and Towers, Yosemite C, Ballroom Level, Bldgs 1,2,3

Mosby

7:00 am - 9:00 am. Breakfast
Hilton San Francisco and Towers, Plaza B, Lobby Level, Buildings 1,2,3

American Society of Colon and Rectal Surgeons - Membership

7:30 am - 8:30 am. Breakfast
Hilton San Francisco and Towers, Union Square 7, Floor Four, Building 3

International Network of Comprehensive Rectal Cancer Centers (INCRCC)

9:00 am - 12:00 pm. Meeting
Hilton San Francisco and Towers, Continental 9, Ballroom Level, Bldgs 1,2,3

Tripler General Surgery

11:00 am - 1:00 pm. Luncheon
Hilton San Francisco and Towers, Franciscan A, Floor Ballroom Level, Bldgs 1,2,3

American Society of Colon and Rectal Surgeons - RF Young Researchers

11:30 am - 12:30 pm. Luncheon
Hilton San Francisco and Towers, Sunset, Lobby Level, Building 1

Afternoon

Association for Surgical Education

1:00 pm - 5:00 pm. Luncheon
Hilton San Francisco and Towers, Union Square 8, Floor Four, Building 3

Evening

Uniformed Services University Surgical Associates Military

5:30 pm - 7:00 pm. Reception
Hilton San Francisco and Towers, Yosemite A, Ballroom Level, Bldgs 1,2,3

University of Colorado Department of Surgery

5:30 pm - 7:30 pm. Reception
Hilton San Francisco and Towers, Yosemite C, Ballroom Level, Bldgs 1,2,3

Metropolitan Group Hospitals Residency in General Surgery

6:00 pm - 8:00 pm. Reception
Fairmont Hotel, Empire, Lobby

Society of Graduate Surgeons of LAC/USC Medical Center

6:00 pm - 8:00 pm. Reception
Hilton San Francisco and Towers, Franciscan B, Ballroom Level, Bldgs 1,2,3

Mt. Sinai Medical Center

6:00 pm - 8:00 pm. Reception
Hilton San Francisco and Towers, Continental 7, Ballroom Level, Bldgs 1,2,3

Thailand Chapter, American College of Surgeons

6:30 pm - 10:00 pm. Reception/Dinner
San Francisco Marriott, Nob Hill B, Lower B-2

North American Chinese Surgical Society Annual Meeting

6:30 pm. Dinner
Harbor Village Restaurant, 4 Embarcadero Center

Michigan State University Department of Surgery

7:00 pm - 9:00 pm. Reception
San Francisco Marriott, Nob Hill A, Lower B-2

Matthew Walker Surgical Society of Meharry Medical College

7:00 pm - 9:00 pm. Dinner Meeting
Delancey St. Restaurant, 600 Embarcadero

University of Missouri Department of Surgery/University of Missouri Surgical Society

7:00 pm - 9:30 pm. Reception/Dinner
Hilton San Francisco and Towers, Continental 8, Floor Ballroom Level, Bldgs 1,2,3

Program Changes

Wednesday, October 13

Multidisciplinary Programs: Trauma Centers and Trauma Systems—Where Are We?, 8:00 am-12:00 noon. (Additions to program)

"Introduction," by Norman E. McSwain, MD, FACS, *New Orleans, LA*.

"The Future of Trauma Surgeons—Is There a Need? Should a General Surgeon Handle Trauma Patients Without Extra Trauma Training? Should There Be a Certificate of Special Competence? Is the One to Two Years of Extra Training Worthwhile? Should All Trauma Patients be Handled by Specially

Trained Surgeons?" by Mary Jo Wright, MD, *New Orleans, LA*.

"Trauma Centers and Case Management—What Do They Do?" by Scott B. Frame, MD, FACS, *Cincinnati, OH*.

"The Role of the Specialty Physician in Trauma Care—Who Is This?" by Mark S. Vrahas, MD, FACS, *Boston, MA*.

"Closing Remarks," by Richard J. Mullins, MD, FACS, *Portland, OR*.

Thursday, October 14

Initiates' Program: Achieving Life's Goals, 1:30-3:00 pm.

"Balance," by Frederick L. Greene, MD, FACS, *Charlotte, NC* (replacing Nicholas Halasz, MD, FACS).

Initiates' Program considers achieving goals in life

Want to attain your professional and personal goals or merely be swept away by the pressures of one's professional imperatives? The ACS Committee on Young Surgeons will sponsor the annual Initiates' Program, titled **Achieving Life's Goals**, which will address this topic. The session will take place on Thursday from 1:30 to 3:00 pm in Room 102 of Moscone Center. David W. Easter, MD, FACS, San Diego, CA, will serve as moderator for the program.

"This year's Initiates' Program is especially important to new College Fellows, but also very applicable to all who wish to conquer, rather than submit to, life's events. Experts in life and surgery will discuss how to manage time, juggle practice responsibilities, stay educated, have fun, remain connected with family and friends, say *no* when appropriate, and yes, eventually retire into a secure future," Dr. Easter said.

At Scudder Oration

Surgeons can be "agents of change"

"On the eve of a new millennium, medicine, surgery, and trauma face some of the most complex changes of our more than 8,000 years of recorded history. This calendar change just happens to coincide with tremendous challenges in medicine, of which the issues now encountered by trauma care are but a heralding warning," according to Kenneth L. Mattox, MD, FACS, professor, surgery department, Baylor College of Medicine, Houston, TX, and clinical professor of emergency medicine at the Uniformed Services University for the Health Sciences, Bethesda, MD.

Yesterday afternoon, Dr. Mattox delivered the annual Scudder Oration on Trauma, TraumaLine 2000, in which he examined the quantum and discontinuous changes that face the field of trauma.

Surgeons, Dr. Mattox believes, are poised on the precipice of change, and are potential agents of change for trauma, medicine, and even society in the next century and beyond.

A review of the earth's and of man's history reveals, Dr. Mattox said, that continual discontinuous changes have affected society and impacted trauma care, and he referred to this history as "one million years of TraumaLine."

In TraumaLine, Dr. Mattox pointed out that change can either be continuous or discontinuous. Continuous change, he said, is slow, methodical, and often monotonous, whereas discontinuous change is "sudden, surprising, and often the result of outside forces." Discontinuous change, he said, results in quantum changes, such as the inven-

tion of ambulances (to rush trauma victims to aid), ligatures, and bloodbanking.

Yet, he said, "Changes do not happen, they are caused." He encouraged surgeons to become agents of change. Often, he added, change is serendipitous, such as Fleming's discovery of penicillin.

Today, he said, "we are facing some of the most interesting and challenging trauma datelines of recorded history." Yet, Dr. Mattox said, some of our current observations about health care are faulty, therefore our approaches to funding and research are faulty. "Current health news is often politically and economically motivated, affecting public and regulatory perceptions," he said.

An example he gave are the massive

changes in the lexicon of medicine, such as the replacement of the word "nurse" with the term "extended practitioner," of which he noted, "The fastest way to destroy a culture is to destroy its language."

In concluding his lecture, Dr. Mattox summed up change events facing TraumaLine 2000, such as managed care, maldistribution of specialized facilities, increase in MVA injuries, threats to GME, and predictions that Medicare is "going broke," to name a few.

However, he said that "the visionary change agent [the surgeon] has an opportunity to take advantage of the change events and make quantum TraumaLine 2000 and HealthLine 2000 advances."

Trauma seminar set for December

The College's Committee on Trauma, Region VII (Iowa, Kansas, Missouri, and Nebraska) is sponsoring the 22nd annual "Advances in Trauma" seminar at The Westin Crown Center in Kansas City, MO, on December 10 and 11.

The regional and state chairs have planned a program that will benefit all those involved in trauma patient care. Program Chairs are: Michael Metzler, MD, FACS, Chief, Region VII; Thomas M. Foley, MD, FACS, Iowa State Chair; R. Stephen Smith, MD, FACS, Kansas State Chair; Marc J. Shapiro, MD, FACS, Missouri State Chair; Joseph C. Stothert, Jr., MD, FACS, Nebraska State Chair; and Frank L. Mitchell, Jr., MD, FACS, Program Co-Chair.

The purpose of this continuing medical education course is to present nationally recognized faculty who will discuss controversial trauma and critical care issues for the continued improvement of the care of the acutely ill and injured patient. The latest trauma knowledge (diagnostic or therapeutic) and techniques presented will provide the audience with the most up-to-date information available.

The Friday program will include presentations on: Tele-Airway Consulting, Status of Virtual Reality Trauma Training Simulators, Priorities in the Management of Profound Shock, Central Nervous System Trauma Update, Open Fractures - What to Worry About Now

(and Later), Spinal Cord Injury Update, Trauma Website Resources, Pelvic Fractures - Integrating Them with Complete Trauma Patient Care, Purposeful Delay in Operative Repair of Thoracic Aorta, and DVT in Trauma Patients: Dx and Prophylaxis. Panel discussions and problem case sessions will also be presented. Five simultaneous breakfast sessions will be held each day. Each session will be limited to 20 participants only. These sessions include: How to Develop a Rapid Sequence Induction Airway Program, Medical Direction in Prehospital Care, Trauma Laparotomy - How I Do It, Burn Injury - Diagnosis and Triage, and Conducting a Trauma QA Program.

Faculty members include: LD Britt, MD, FACS; David Cifu, MD; Robert L. Coscia, MD, FACS; David V. Feliciano, MD, FACS; David B. Hoyt, MD, FACS; Roger E. Huckfeldt, MD, FACS; G. Patrick Kealey, MD, FACS; Paula Kempf, RN; Colin F. MacKenzie, MD; Kenneth L. Mattox, MD, FACS, Houston, TX; Raj K. Narayan, MD, FACS; Steven A. Olson, MD; Marc J. Shapiro, MD, FACS; R. Stephen Smith, MD, FACS; Joseph C. Stothert, MD, FACS; Bryan R. Troop, MD, FACS; and Donald D. Trunkey, MD, FACS.

For more information, visit the ACS Web site at www.facs.org. Brochures are available at the ACS Resource Center.

Congress Chronicle

A surgeon "must constantly be a student"

The 46th Clinical Congress, which took place in San Francisco in 1960, featured the Presidential Address by I. S. Ravdin, MD, FACS, professor of surgery at the University of Pennsylvania School of Medicine, and for whom the I.S. Ravdin Lecture in the Basic Sciences is dedicated.

Dr. Ravdin spoke on "Whither Goest the American Surgeon," during which he told the audience: "The responsibilities which the surgeon accepts when he agrees to take care of a patient are enormous. He must assure himself that as far as possible a reasonably accurate diagnosis has been made, and that an operation is indicated...He must anticipate complications and if possible pre-

vent them. He must by every possible means speed the recovery of the patient, and he must to the best of his knowledge be sure that he has chosen wisely the operation calculated to cure the patient, or to provide the longest survival. If he is to do these things, he must constantly be a student. If he does not throughout his professional lifetime remain a student, he will find himself in the position of being competent for doing surgery during one period of his professional life and incompetent in another."

A. Gerson Greenburg, MD, PhD, FACS, presents the Ravdin Lecture this afternoon at 1:30 pm in the Esplanade Ballroom of Moscone Center.



The ACS Resource Center continues this year to live up to its name: Surgeons can stop by to inquire about various ACS departments and programs in this popular Technical Exhibit.



Medical students attending this year's Congress and members of the Committee on Surgical Education in Medical Schools gathered for a group picture on Sunday evening. Seated, front row, left to right: Linda Phillips, MD, FACS (committee member); Jeffrey Garrett, University of Oklahoma College of Medicine, Oklahoma City, OK; Margaret Timmons Marshall, University of California, San Diego, School of Medicine; Richard W. Schwartz, MD, FACS (committee chair); Frederic S. Bongard, MD, FACS (committee member); Leigh Anne Neumayer, MD, FACS (committee member); Toni Michelle Ganzel, MD, FACS (committee member); David A. Rogers, MD, FACS (committee member); Karen E. Deveney, MD, FACS (committee member); Ajit K. Sachdeva, MD, FACS (committee member); Richard K. Spence, MD, FACS (committee member); and Elisa Birnbaum, MD, FACS (committee member).

Second row: Alexandra Mihailovic, McMaster University Faculty of Health Sciences, Hamilton, ON; Marcus A. Roux, Texas A&M University Health Science Center, College Station, TX; Sean J. Barnett, Wright State University School of Medicine, Dayton, OH; Ivan Rapchuk, University of Manitoba Faculty of Medicine, Winnipeg, MB; Cody Harlan, University of Nebraska College of Medicine, Omaha, NE; Sean M. Kincaid, University of Texas Medical School at San Antonio; Kevin Hudenko, University of New Mexico School of Medicine, Albuquerque, NM; Jessica B. O'Connell, University of Texas Medical School at Houston; Bryan Dicken, University of Alberta, Faculty of Medicine, Edmonton, AB; Ryan J. Grabow, Medical College of Ohio School of Medicine, Toledo, OH; Jonathan Nickoloff, Creighton University School of Medicine, Omaha, NE; Jocelyn Segall; Marineh Yagubyan, University of Southern California School of Medicine, Los Angeles, CA; Alen Voskanian, University of California, Irvine, College of Medicine, Orange, CA; and Susan Kaiser, MD, FACS (committee member).

Third row: Jonathan T. Carter, Stanford University School of Medicine, Stanford, CA; Edward Kim, University of California, San Francisco, School of Medicine; Sandeep Gupta, University of Vermont College of Medicine, Burlington, VT; Seon Jones, University of Texas Medical Branch, University of Texas Medical School at Galveston; Ryan Dobbs, University of Nevada School of Medicine, Las Vegas, NV; Christopher L. Bell, Texas Tech University Health Sciences Center, El Paso, TX; Cedric S.F. Lorenzo, University of Hawaii John A. Burns School of Medicine, Honolulu, HI; Steven Kelley, Loma Linda University School of Medicine, Loma Linda, CA; Gannon Randolph, Oregon Health Sciences University School of Medicine, Portland, OR; Brian Bressler, University of British Columbia Faculty of Medicine, Vancouver, BC; Vivian Wong, University of Calgary Faculty of Medicine, Calgary, AB; Judy Pang, University of Iowa College of Medicine, Iowa City, IA; Kelly Ward, University of South Dakota School of Medicine, Sioux Falls, SD; and Allan Tsung, SUNY Health Science Center at Brooklyn College of Medicine, Brooklyn, NY.

Back row: Thomas R. Gadacz, MD, FACS (committee member); Eric Anderson, University of Washington School of Medicine, Seattle, WA; George Crawford, Baylor College of Medicine, Houston, TX; Zuri A. Murrell, University of California, Los Angeles, College of Medicine; Colin Trout, University of Arizona College of Medicine, Tucson, AZ; Jennifer Watters, University of Texas Southwestern Medical School, Dallas, TX; M. Daily, University of Utah School of Medicine, Salt Lake City, UT; Gennady Ukrainsky, SUNY at Stony Brook Health Sciences Center School of Medicine, Stony Brook, NY; Nathaniel Fernandez, University of Colorado School of Medicine, Denver, CO; Dean DeRoberts, SUNY Health Science Center at Syracuse College of Medicine, Syracuse, NY; James Robert Macho, MD, FACS (committee member); and Thomas G. Lynch, MD, FACS (vice-chair).



Registration totals

The latest in technology awaits surgeons attending the Clinical Congress, such as high-tech offerings (above), and the Informatics Booth (left).

As of Tuesday afternoon, total registration for the Clinical Congress was 18,653; 8,073 were physicians and the rest were exhibitors, guests, spouses, or convention personnel.